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## Declassification Review by NIMA / DoD

TCS-9898-65  
20 August 1965

Copy 9

MEMORANDUM FOR: Chairman, Joint Atomic Energy Intelligence Committee

THROUGH : Chief, Requirements Branch  
Reconnaissance Group, CGS

SUBJECT : Second Group of 26 Epicenters

REFERENCE : Requirement JAEIC 5-5  
(NPIC Project 11340-5)  
TCS-9895-65, 19 August 1965

Enclosed are the photo interpretation reports on the second group of 26 selected epicenters in the USSR. An analysis on the third group of epicenters is in progress and will be forwarded when completed.



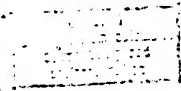
25X1A

Colonel, USA  
Assistant for Photographic Analysis, NPIC

Enclosures:  
26 epicenters (12 sets)

Distribution:

1&2-JAEIC (w/enc)	10-DIAXX-4
3-Dir/NPIC	11-NSA/LO/NPIC
4-PAG/NPIC	12-AFNI-BA
5-IPO/PAG/NPIC	13-OPNAV 922Y3
6-S&TD/PAG/NPIC	14-Army/SPAD
7-CIA/IAD/NPIC (w/enc)	15-DIAXX-3A (w/enc)
8-OS/NPIC	16-DIAXX-3C (w/enc)
9-CSD/NPIC (w/enc)	



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**EPICENTER:**

73

**DATE:**

27 Feb 64

**COORDINATES:**

44-18N/79-24E (44.30N-79.40E)

25X1D



**DISCUSSION:**

No evidence of nuclear testing.  
A remote isolated region served by an all-weather road. Several hamlets and nomadic dwellings. Shows fault traces with mud flows entering a down-thrown valley. Needs better post-event photography which is probably available but later than time specified in project requirement. Immediate epicenter site appears unchanged.  
A review of this site with the requestor on 17 Aug 65, has resulted in placing this epicenter in category "b" in accordance with JAEIC Memo of 3 Aug 65.

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Enc to TCS-9898-65

**EPICENTER:**

134

**DATE:**

12 Apr 64

**COORDINATES:**

42-48N/45-12E (42.80N/45.20E)

25X1D

**DISCUSSION:**

No evidence of nuclear testing.

A high mountain top region usually enshrouded by clouds. Road building to a high elevation quarry at 43-01N/45-21E had progressed during above time interval. During same time interval road had progressed to three areas of limestone ledge prospecting, north of epicenter.

If seismographs are able to record blasting reaching a magnitude of 4.9 in conventional sized prospecting areas and a quarry they must be off their calibration or else the Soviets must be using very powerful explosives. Since neither possibility seems presently correct the event must be the result of natural causes or the operation of mountain-making (orogenic) forces still commonly experienced in the Caucasus Mountains.

A review of this site with the requestor on 17 Aug 65, has resulted in placing this epicenter in category "a" in accordance with JAEDC Memo of 3 Aug 65.

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Enc to TCS-9898-65

**EPICENTER:**

135

**DATE:**

13 Apr 64

**COORDINATES:**

40-18N/52-06E (40.30N/52.10E)

25X1D

**DISCUSSION:**

25X1D

25X1D

No evidence of nuclear testing.  
No evidence of drilling platform or craters on sea bottom. No water turbidity over area, the so-called Apsheron sill. Three ships seen moving northwestward over area on [REDACTED] so area had not been closed off. JPRS 31328, p. 156, 30 Jul 65; UNCL, reports area was investigated by seismic prospecting using explosives in 1958. Area perhaps could be undergoing a resurvey in [REDACTED]  
A review of this site with the requestor on 17 Aug 65 has resulted in placing this epicenter in category "b" in accordance with JABIC Memo of 3 Aug 65.

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Enc to TCS-9898-65

**EPICENTER:**

204

**DATE:**

5 Jun 64

**COORDINATES:**

43-18N/45-00E (43.30N/45.00E)

25X1D

**DISCUSSION:**

No evidence of nuclear testing. Numerous scattered old quarries, open pits, drainage and oil-industry projects visible. No large rock falls, craters, or fissures observed. Three MREM sites could be involved, as they were under construction during the above time interval.

If seismographs were able to record blasting reaching a magnitude of 4.6 in conventional sized quarries and construction projects they must either be off their calibration or else the Russians must be using very powerful explosives. Since neither possibility seems presently correct the event must be due to natural causes and is related to mountain-making forces caused by elastic rebound of the flanks of the mountains undergoing upward thrusting. The undamaged structures of a rather densely populated district suggest that the epicenter is misplaced.

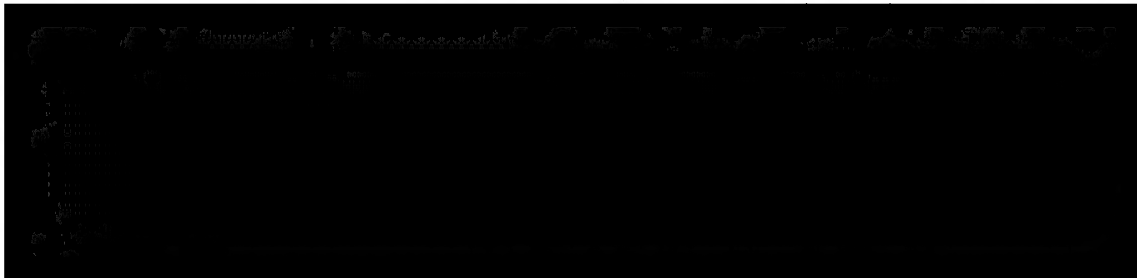
A review of this site with the requestor on 17 Aug 65, has resulted in placing this epicenter in category "a" in accordance with JAEIC Memo of 3 Aug 65.

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**EPICENTER:** 250  
**DATE:** 13 Jul 64  
**COORDINATES:** 41-36N/44-24E (41.60N-44.40E)

25X1D



**DISCUSSION:**

No evidence of nuclear testing. Open pit remains unchanged without a large rock fall at 41-30N/44-10E. Likewise underground tunneling at 41-30N/44-35E, along Khami River, which may be related to storage for a SAM site not far to the eastward. Extensive earthquake investigations are in progress at Tbilisi located not far to the eastward, also. Region shows many small towns and light farming and orcharding occupancy. A review of this site with the requestor on 17 Aug 65, has resulted in placing this epicenter in category "a" in accordance with JAEIC Memo of 3 Aug 65.

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Enc to TCS-9898-65

**EPICENTER:**

293

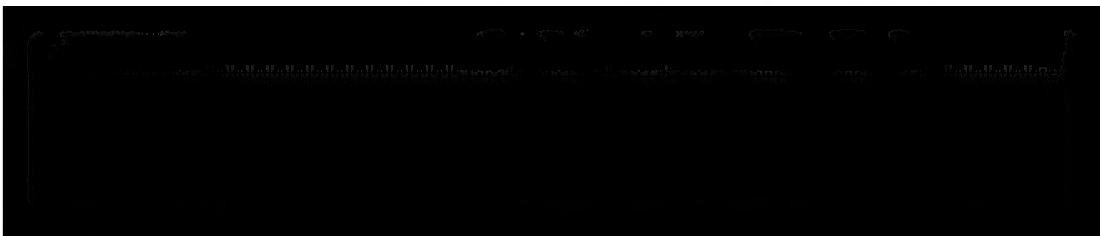
**DATE:**

10 Aug 64

**COORDINATES:**

42-18N/77-36E (42.30N-77.60E)

25X1D



**DISCUSSION:**

25X1D

No evidence of nuclear testing. No drilling platform nor anchored boats observed on the lake. No seiche or wave marks observed along the deep-water bordered shores. Not as much longshore sediment is being moved in [REDACTED] but this could reflect reduction of wind strength. Possible torpedo tests from an experimental installation at the west end of lake should be considered. Lake basin is tectonically very active and this event could represent further subsidence following a disastrous mud flow of 7 Jul 63. A review of this site with the requestor on 17 Aug 65, has resulted in placing this epicenter in category "b" in accordance with JAEIC Memo of 3 Aug 65.

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**EPICENTER:**

301

**DATE:**

16 Aug 64

**COORDINATES:**

39-48N/52-36E (39.80N-52.60E)

25X1D

**DISCUSSION:**

No evidence of nuclear testing. No evidence of drilling platform or craters on sea bottom. No water turbidity over area, the so-called Apsheron sill. JPRS 31328, p. 156, 30 Jul 65, UNCL., reports area was investigated by seismic prospecting using explosives in 1958. Area may have been undergoing a resurvey in 1964. A review of this site with the requestor on 17 Aug 65, has resulted in placing this epicenter in category "b" in accordance with JAEIC Memo of 3 Aug 65.

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Enc to TCS-9898-65

**EPICENTER:**

347

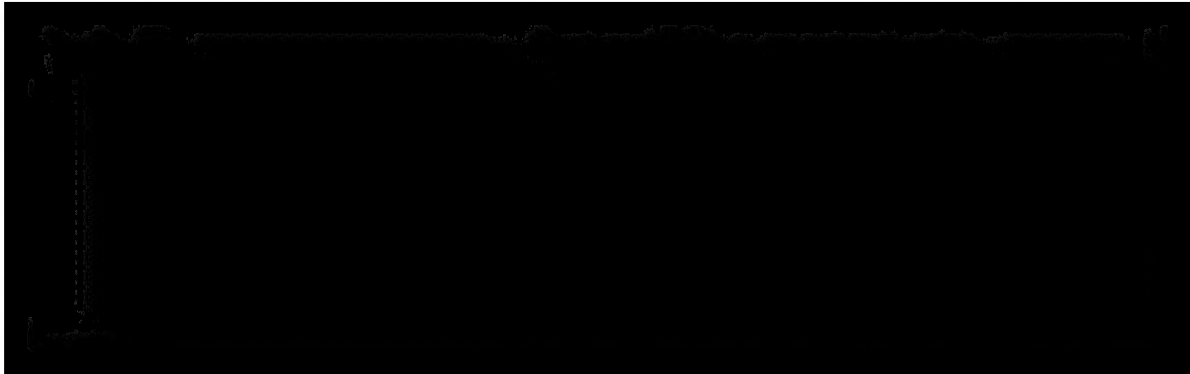
**DATE:**

16 Sep 64

**COORDINATES:**

56-18N/162-48E (56.300N-162.800E)

25X1D



**DISCUSSION:**

There is no evidence of nuclear testing in the area.

Although there are facilities in Ust Kamchatsk, the largest community in the area, which could provide the necessary support for a nuclear event (Ust Kamchatsk contains barracks, communications facilities, an airfield, etc.), a study of the pre- and post-event photography revealed no roads leading into secluded or remote areas, no changes in the terrain features, no mines or tunnels and no facilities or equipment that could be associated with pre- or post-nuclear event activities. This epicenter therefore is placed in category "b" in accordance with JAEIC Memo of 3 Aug 65.

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Enc to TCS-9898-65

**EPICENTER:**

371

**DATE:**

2 Oct 64

**COORDINATES:**

51-54N/143-00E (51.90N-143.00E)

25X1D



**DISCUSSION:**

25X1D

25X1D

No evidence of nuclear testing. Geophysical prospecting lines seen in [REDACTED] have all but disappeared in [REDACTED] just N of epicenter. No disturbance at epicenter. Air field and oil base activity in S part of search area. Several towns of some size also associated with foregoing activities. A review of this site with the requestor on 17 Aug 65, has resulted in placing this epicenter in category "c" in accordance with JAEIC Memo of 3 Aug 65.

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**EPICENTER:**

374

**DATE:**

3 Oct 64

**COORDINATES:**

52-00N/142-54E (52.00N-142.90E)

25X1D



**DISCUSSION:**

25X1D

No evidence of nuclear testing.  
Geophysical prospecting grid lines seen in [redacted] in central and S parts of search area. No disturbance is seen at epicenter. Air field and oil base activity in S part of area. Several towns of some size are also associated with foregoing activities. Heavy snow hampers interpretation of fissuring of ground. A review of this site with the requestor on 17 Aug 65, has resulted in placing this epicenter in category "c" in accordance with JAEIC Memo of 3 Aug 65.

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**EPICENTER:**

404

**DATE:**

24 Oct 64

**COORDINATES:**

65-42N/145-24E (65.70N-145.40E)

25X1D

**DISCUSSION:**

No evidence of nuclear testing.  
Remote isolated region with no evidence of human occupancy. Existence of a cinder cone (volcanic) within 50 kilometers and fault-line breaks (scarps) within the 25 km search area together with sets of river terraces suggest natural causes for a seismic event.  
This event was also one of the first lot of 20 epicenters to be investigated by the Nuclear Energy Branch.  
A review of this site with the requestor on 17 Aug 65, has resulted in placing this epicenter in category "b" in accordance with JAEIC Memo of 3 Aug 65.

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Enc to TCS-9898-65

**EPICENTER:**

468, 469, 473, 480, 488, 491, 495, 496,  
500, 508, 509, 515, 516, 519, 521, 522

**DATE:**

11 Nov 64

**COORDINATES:**

56-30N/161-12E (56.500N-161.200E)  
(488, 500, 509, 521)  
56-24N/161-24E (468, 491)  
56-30N/161-18E (469, 519)  
56-36N/161-06E (473, 522)  
56-36N/161-12E (480, 496, 516)  
56-24N/161-18E (515)  
56-30N/161-06E (508)  
56-36N/161-18E (495)

25X1D

**DISCUSSION:**

All the above listed epicenters are clustered within an area of about 20 by 15 km on the southern side and base of a volcanic mountain, Shiveluch. There are no roads, mines or any cultural facilities within the 20 by 15 km area. An unsurfaced, narrow road passes through the western part of the search area and connects a previously identified missile tracking station, located about 31 km north of the combined area of the epicenters with Klyuchi to the southwest. The community of Klyuchi 26 km SW of the epicenters on the southern bank of the Kamchatka River with its communication facilities and barracks which are associated with the Tyuratam Missile Test Range could possibly provide support for a nuclear test. However, a detailed study of pre- and post event photography revealed no activities and facilities which are generally associated with a nuclear test and no bridges across the Kamchatka River to provide easy access to the area of the epicenters. There is sufficient evidence indicating the events were caused by natural forces.

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A study of the pre- and post-event photography revealed that the volcanic mountains in and near the epicenters were not active on [REDACTED]

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[REDACTED] Diminished volcanic activity can be observed [REDACTED]

25X1D

A review of all the observations places these epicenters in category "b" in accordance with JAEIC Memo of 3 Aug 65.

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